

Re: RI REG 2022 PY Program Development Announcements: Request for Comments Regarding Interconnection Proposal for 2023 Program Year and National Grid Determination Regarding Carport Solar Adder

To Whom It May Concern:

We are very confused by National Grid's determination regarding the Carport Solar Adder. Removal of the adder makes ~2MW of projects in our pipeline infeasible and they will likely be cancelled.

First, we don't understand why National Grid would propose removing the adder altogether. Why not set it at a rate that would provide an acceptable Benefit-Cost ratio and let the developers decide whether that incentive rate is enough to justify the development and construction of the system? The adder is not a carveout of MW in the program and it does not reduce the opportunity for non carport projects to participate in the program. The purpose of the adder is not to guess what developers will need to build a carport system, but instead to indicate the price at which the given system would meet the program requirements. The worst-case scenario is that no one would apply for the adder if it were insufficiently priced.

Second, the methodology used to conclude that the benefit does not justify the cost of an adder doesn't really make sense to us. The BCA ratios were calculated using a proposed adder of \$0.075/kWh when the adder offered during the pilot program has been \$0.06/kWh and \$0.05/kWh in the last 2 program years. Why not analyze the benefit-cost ratio using the adders offered to date? Alternatively, why not calculate the benefits of the program and base the proposed adder from that, rather than vice versa?

I used the tables on slide 18 and 19 of SEA's September 23, 2021 presentation to estimate program costs for scenarios where the adder is at \$0.05/kWh, \$0.04/kWh, and \$0.03/kWh. I also recreated the table at \$0.075/kWh to confirm it was consistent with the values in the presentation. I then calculated the BCA Ratio for the various scenarios, similar to the table presented on slide 18.

Case	Project Category	NPV Benefit	3 cent adder		4 cent adder		5 cent adder		7.5 cent adder	
			NPV Cost	BCA Ratio	NPV Cost	BCA Ratio	NPV Cost	BCA Ratio	NPV Cost	BCA Ratio
Low Benefits	Commercial	\$607	\$501	1.21	\$668	0.91	\$835	0.73	\$1,253	0.48
Low Costs	Large	\$419	\$514	0.82	\$685	0.61	\$856	0.49	\$1,285	0.33
High Benefits	Commercial	\$2,223	\$501	4.44	\$668	3.33	\$835	2.66	\$1,253	1.77
Low Costs	Large	\$684	\$514	1.33	\$685	1.00	\$856	0.80	\$1,285	0.53
Low Benefits	Commercial	\$607	\$558	1.09	\$744	0.82	\$930	0.65	\$1,396	0.43
High Costs	Large	\$419	\$572	0.73	\$763	0.55	\$953	0.44	\$1,432	0.29
High Benefits	Commercial	\$2,223	\$558	3.98	\$744	2.99	\$930	2.39	\$1,396	1.59
High Costs	Large	\$684	\$572	1.20	\$763	0.90	\$953	0.72	\$1,432	0.48
Average BCA: All sizes				1.85		1.39		1.11		0.74
Median BCA: All sizes				1.20		0.90		0.72		0.48
Average BCA: Commercial sizes				2.68		2.01		1.61		1.07
Median BCA: Commercial sizes				2.60		1.95		1.56		1.04
Average BCA: Large sizes				1.02		0.76		0.61		0.41
Median BCA: Large sizes				1.01		0.75		0.60		0.40



At a \$0.03/kWh adder, the mean and median BCA ratio for all scenarios is greater than 1, which would meet the program's requirement for enacting a policy adder. Digging a bit further, when we segregate the commercial and large scale carports, we see that commercial scale carports show a mean and median BCA of greater than 1 in every scenario, not just in the \$0.03/kWh scenario. To us, this suggests two paths forward: either

- a) provide a single carport adder across all sizes which is low enough to provide a BCA ratio greater than 1; or
- b) provide a commercial scale carport specific adder.

In either scenario, there is no justification for removing the adder completely because there is an adder rate greater than \$0.00/kWh which provides a BCA ratio greater than 1. Between those two alternatives, the second seems to be the most beneficial to the program, as it would incentivize the system type which provides the highest benefit (commercial scale carports) rather than try to subsidize a neutral incentive (Large scale carports.) This conclusion is also supported by the fact that the mean benefits scenario (p.16 of SEA's presentation) for commercial scale carports is almost 4x the high benefits estimate for large scale carports (\$2,312/kW vs \$605/kW.)

In the first two years of the pilot program, 50% of available capacity has been enrolled, and potentially more pending the third enrollment of 2021. This is not evidence of an inadequate incentive, but rather is indicative of the amount of time it takes for developers to recognize and react to new opportunities, to find a suitable site(s) and to have an interconnection ready to submit into the program. As mentioned previously, we have 2MW of projects under development. There are many others underway as well.

The removal of this adder provides zero upside for the program. It does not free up MW's for other, more viable projects, but instead limits project opportunities in general. We believe it should be reconsidered for the 2022 program year as well as future years.

Thank you,
Sevag Khatchadourian
Oak Square Partners